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environmental condition detection means for detecting an environmental condition relating to a traveling road on which the vehicle is driven according image information or the information acquired from a radar; and

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light distribution control means for varying the light distribution of a headlamp attached to a vehicle in accordance with variation with the travel condition of the vehicle and the environmental condition,

wherein said light distribution control means performs light distribution control over the headlamp according to one of information adopted with the priority given thereto out of the information derived from said map information acquiring means and the information detected by said environmental condition detection means or according to information complemented with both kinds of information above.--

--2. (Amended) A vehicle headlamp apparatus as claimed in claim 1, wherein a lane with respect to a road on which the vehicle is being driven is detected and the detected result is judged good or bad;

light distribution control over the headlamp is performed by switching the information detected by said environmental condition detection means and the information derived from said map information acquiring means according to the result thus judged. --

- 3. A vehicle headlamp apparatus as claimed in claim 2, wherein when the result of lane detection is judged to be good, priority is given to the information detected by said environmental condition detection means.
- 4. A vehicle headlamp apparatus as claimed in claim 1, wherein when the first information acquired by said map information acquiring means is different from the second information acquired by said environmental condition detection means, the first information is modified according to the second information and the light distribution control over the headlamp is performed by using the modified information.
- 5. A vehicle headlamp apparatus as claimed claim 1, wherein said environmental condition detection means comprises an imaging unit for forming an image ahead of the vehicle; when detection capability of said imaging unit is low, light distribution control means performs light distribution control over the headlamp according to the information derived from said map information acquiring means.



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6. A vehicle headlamp apparatus as claimed claim 2, wherein said environmental condition detection means comprises an imaging unit for forming an image ahead of the vehicle; when lane-mark detection capability of said imaging unit is low, light distribution control means performs light distribution control over the headlamp according to the information derived from said map information acquiring means.

- 7. A vehicle headlamp apparatus as claimed in claim 1, wherein when worsening of weather is detected, said light distribution control means performs light distribution control over the headlamp according to the information derived from said map information acquiring means.
- 8. A vehicle headlamp apparatus as claimed in claim 1, further comprising steering information acquiring means for acquiring steering information to supply said light distribution control means.
- 9. A vehicle headlamp apparatus as claimed in claim 1, wherein said light distribution control means controls an optical axis of the head lamp in a vertical direction to vary the light distribution thereof.
- 10. A vehicle headlamp apparatus as claimed in claim 1, wherein said light distribution control means controls an infrared lamp that emits a near infrared ray.
- 11. A vehicle headlamp apparatus as claimed in claim 1, wherein said light distribution control means controls an optical axis of the head lamp in a lateral direction to vary the light distribution thereof.
- --12. (Amended) A vehicle headlamp apparatus as claimed in claim 1, wherein said light distribution control means controls an optical axis of the head lamp to direct downward so as to illuminate an area ahead of the vehicle. --
- --13. (Amended) A vehicle headlamp apparatus as claimed in claim 1, wherein said light distribution control means controls to irradiate a lane mark near the vehicle. --

## In the abstract:

Please replace the abstract with the following version.

-- In a vehicle headlamp apparatus 1, there are provided a map information acquiring means 2 for acquiring positional information on a vehicle on a map and the environmental

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information, and an environmental condition detection means 3 for detecting an environmental condition relating to a traveling road on which the vehicle is driven according image information or the information acquired from a radar. The light distribution control means 4 of a lighting device 5 performs light distribution control over the headlamp according to more reliable one of both kinds of information adopted with the priority given thereto out of the information derived from the map information acquiring means 2 and the information detected by the environmental condition detection means 3 or according to the information complemented with both kinds of information described above. --